Alabama Commission on Higher Education

PROPOSAL FOR A NEW DEGREE PROGRAM – NEW APPLICATION TOOL

Please check one: [X] Baccalaureate Program [ ] Graduate Program

A. General Information

1. Institution: University of Montevallo

2. Institutional Contact Person:
   Title: Dr. Stephen Craft
   Telephone: 205.665.6540
   E-mail: scraft@montevallo.edu

3. Program Identification--
   Field of Study/ Program Title: Computer Informatics
   Degree: Bachelor of Science
   CIP Code: 11.0104

4. Date of Proposal Submission: June 9, 2017

5. Proposed Program Implementation Date: August 21, 2018

6. Program Administration:
   Name of College/School: Michael E. Stephens College of Business
   Name of Dean: Stephen H. Craft
   Name of Department: N/A
   Name of Chair: Lanny McMinn

Note: Please expand all response fields as necessary.

B. Program Purpose and Description

1. In no more than one paragraph describe the purpose of the proposed program. Please also include a brief statement regarding how the program's purpose is related to the University's mission and goals.

This program is designed to provide students with the knowledge and skills needed to meet the labor demands in the computing job market in central Alabama and beyond. The program was designed using input from the Birmingham Large Users Group (BLUG) which consists of Chief Information Officers from large corporate, government and educational organizations in the Birmingham market. Member organizations include, BBVA Compass Bank, Blue Cross/Blue Shield, Drummond, UAB, and the Social Security Administration. The program will offer a Bachelor of Science degree with the strong liberal arts component for which the University of Montevallo is well-known. In the university's 2015-2020 Strategic Plan, a stated goal is to expand and enhance undergraduate and graduate programs of study. Reflecting the university's core identity, the proposed program is strongly informed by the liberal arts mission of the University of Montevallo. Specifically, graduates will be prepared to be expert communicators of technical information for non-technical audiences and will be equipped to bring human interaction and critical thinking skills to decisions surrounding the interface of humans and technology – all accompanying the technical skills required of a computing professional. The goal of this degree is to prepare students with the technical and interpersonal skills necessary for a successful career in organizations similar to those represented by the membership of the BLUG as well as smaller business entities. We anticipate the program will bring new students to the university. Results from a questionnaire completed by University of Montevallo admissions recruiters indicated over 300 prospective students inquired about a major in a computing related field within the last two years.

2. Please provide a description of the specific kinds of employment opportunities, post-graduate professional degree programs, and other graduate programs that will be available to the graduates.

   An informatics major can expect employment in areas such as healthcare, government entities, private corporations, non-profit organizations and publicly traded corporations with varying titles such as system analyst, web designer, computer programmer, information architect, etc.

   There are multiple public universities in Alabama that have graduate programs in computer science including University of Alabama at Birmingham, University of Alabama at Huntsville, University of Alabama, Auburn University, University of South Alabama, and Troy University.

3. Succinctly list at least four (4) but no more than seven (7) of the most prominent ***student learning outcomes*** of the program. These outcomes should lend themselves to subsequent review and assessment of program accomplishments.

   - Students will be able to design and build information systems that are effective and easy to use through algorithm analysis, software design and databases.

- Students will be able to design the systems architecture necessary to store and access repositories of information.
- Students will be fluent in at least one object-oriented programming language.
- Students will develop the skills needed to lead organizations through decision making, utilizing large data sets.
- Students will understand the fundamentals of data assurance and cybersecurity.

C. Need for the Program

1. *State need.* Briefly describe why the program is specifically needed for the State of Alabama. (State need is considered a priority in the review process.)

Currently, the four-year universities in Alabama are not graduating sufficient numbers of computer science/information technology students to meet the job demand in these fields within the state. Comparing the 2014-2015 Institutional Completions Summary Report from www.ache.alabama.gov to the current/projected needs for computer information jobs from www2.labor.alabama.gov there is an obvious gap in the supply and demand for individuals in computer information occupations. For example, in 2014-15 the four-year universities graduated 414 undergraduates in the computer and information sciences field, whereas in 2014-15 the demand for individuals with a bachelors degree in the field was 900 jobs per year.

The University of Montevallo, Alabama's designated public liberal arts university, is also the only public four-year institution in Alabama that does not offer a program in a computing field. This proposed program is unique in Alabama and will be the only degree under the Informatics CIP code. This program is a generalist degree in computer informatics which differs from a traditional computer science degree as the curriculum is designed to be conceptual and practical and focused on the human and humanistic dimensions of the design and use of information systems.

The new program will provide a strong liberal arts background in addition to the knowledge and skills required for a job in computer informatics. As noted by Joel C. Adams in his blog on the Communications of the ACM (Association of Computing Machinery) website, "Employers also place a high value on communication skills, collegiality, being able to work in groups, and other 'people' skills. To maximize your career opportunities, choose a college or university that will help you develop these skills to complement the technical skills. Your technical skills may get you that first job; your people skills will play a large role in determining your career trajectory." The University of Montevallo is in a unique position to provide graduates with the people skills necessary for a successful career.

The US-Bureau of Labor Statistics predicts that each year between now and 2024, there will be nearly 35,000 new software development jobs, and nearly 20,000 new systems analyst jobs in the nation.

2. *Employment Opportunities.* Based on your research on the employment market for graduates of this program, please complete the following table reporting the total projected job openings (including both growth and replacement demands) in your local area, the state, the SREB region, and the nation. These job openings should represent positions that require graduation from a program such as the one proposed.

Career and College Readiness/Preparation -- Projected Job Openings

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Local	320	320	320	320	320	1600
State	900	900	900	900	900	4500
SREB	18,400	18,400	18,400	18,400	18,400	92,000
Nation	86,000	86,000	86,000	86,000	86,000	430,000

Please briefly describe your methodology for determining employment opportunities – projected job openings. Be sure to cite any data sources used in formulating these projections. The actual survey instrument, detailed results, and associated data file(s) must be maintained internally by the institution for five years from the implementation date. The survey upon which the proposal is based must be available for ACHE Staff examination upon request for that five year timeframe. The survey instrument, detailed results, or associated data file(s) should not be included in the proposal.)

These state-wide numbers were taken from the Alabama Department of Labor (DOL) Statistics website, from the table “Computer and Mathematical Employment & Annual Average Job Openings Base Year 2014 and Projected Year 2024. The national numbers were taken from the Employment Projections on the Bureau of Labor Statistics website. The local numbers are from the Alabama DOL Statistics website as well, but from the “Computer and Mathematical Employment & Annual Average Job Openings Base Year 2012 and Projected Year 2022”. The newest projections were not available at the time of this writing. The SREB-wide numbers were taken from a clearinghouse “Projections Central State Occupational Projections”.

3. *Student Demand - Enrollment projection.* Please briefly describe your methodology for determining enrollment projections. If a survey of student

interest was conducted, *please briefly describe the survey instrument, number and percentage of respondents, and summary of results.*
(The survey instrument, and associated data file(s) need not be included in the proposal. This proposal information should be maintained for ACHE Staff review for five years from the actual implementation date.)

A questionnaire was sent via a broadcast email to the current student body at the University. Thirty-five students responded. The respondents indicated positive interest in the new proposed program. Metadata about the respondents was captured and five questions were asked regarding interest in the proposed major. The students' responses to the questionnaire indicate an interest in the proposed major within the current student body. A few students indicated they may transfer to another institution in order to major in a computing related field. The demand for this major is already on campus.

Question	Results
Is this major of interest to you?	74% expressed interest or were very interested.
Do you believe this major would make the University of Montevallo more attractive to prospective students?	71% agreed or strongly agreed.
Is this a major that you would have seriously considered if it had been offered before now?	49% agreed or strongly agreed.
Do you think a major in Computer Informatics would enhance your employment opportunities when you graduate?	86% believed the new major would likely or very likely enhance employment opportunities upon graduation.
How likely would you be to declare a major in Computer Informatics?	46% were likely or very likely to declare a major in Computer Informatics.

Sampling of student thoughts and opinions.

- I do have an interest in Computer information and because the major was not offered, I declared a minor in MIS just to get the same opportunities. My brother is also interested in Computer informatics but Montevallo is not in his radar for a school given that it is not offered at the moment.

- I think that this is a great idea! If Computer Informatics was offered here, I wouldn't have to transfer to some other school to get a major I am seriously considering!

- If this degree isn't offered, I will probably transfer to a school with a similar degree after finishing my general coursework here.

- Montevallo is severely limiting the prospective students it brings in by not having one of the most common majors in America right now.

- Personally, I think that this major should have been offered a long time ago. Computer Informatics (or Computer Science) has been a very popular major amongst other universities its popularity is growing as we progress in this age of Information Technology. I think that this should also be offered as a minor to supplement other majors. It would certainly increase the likelihood of undergraduates getting an internship in any digital-related field.

Among 294 majors listed by students completing the ACT entrance exam in 2016, computer related majors ranked as the 6th most demanded field with more than 31,700 students expressing an intent to complete the major.

According to STARS (Statewide Transfer & Articulation Reporting System) reports nearly 5% of the approximately 29,000 inquiries were for a computing related major.

The Alabama Department of Labor's "Alabama's Hot 40 Demand Occupations" lists computer systems analysts and software developers among the highest demand occupations requiring a bachelor's degree. The Alabama Department of Labor – Labor Market Information Division estimates that our state economy has active demand for 900 new undergraduates each year with computer-related technology degrees. While there are no other informatics programs in Alabama, the total output of bachelor-level graduates among computer science programs is 414 new graduates per year. This leaves a state-wide shortfall of approximately 486 graduates annually. The economic need for this program is strong.

D. Specific Rationale (Strengths) for Program

What is the specific rationale (strengths) for recommending approval of this proposal? List no fewer than three (3) and no more than five (5) potential program strengths.

Students will experience the intimacy of a small school informed by UM's identity as a liberal arts institution.

There is an existing demand for students with this type of degree in Alabama that is not being met by the present four year institutions in the state. This program will enable graduates to become active members of the future work force by satisfying job demand.

This program builds off the strength of our existing faculty in the College of Business who have educational and professional experience in management information systems, computer science and data decision science.

Please note that letters of support may be included with the proposal.

Letters of support from the President & CEO of the Greater Shelby County Chamber of Commerce, and the CIO of Shelby County are provided on the next two pages.

Greater Shelby County Chamber of Commerce

Serving all of Shelby County and the following municipalities:
Alabaster • Calera • Chelsea • Columbiana • Harpersville • Helena • Hoover
Indian Springs Village • Montevallo • Pelham • Vincent • Westover • Wilsonville • Wilton

April 5, 2017

Dr. Stephen H. Craft
Dean, Stephens College of Business
University of Montevallo
Station 6230
Montevallo, AL 35115

Dear Dr. Craft:

The purpose of this letter is to express the Greater Shelby County Chamber of Commerce's support of the Informatics syllabi which we believe will, in turn provide students at the University of Montevallo with the knowledge and skills they'll need to meet the labor demands in the computing job market.

With more than 1,000 investors in the Chamber's program of work, we believe this curricula offers significant advantages to enhance career readiness for the University's graduates in the coming years. What's more, during our business retention and expansion visits -- which we have conducted since 2013 -- businesses in Shelby County are expressing concern over skill sets for their future candidates for employment. The addition of this curricula to the University's course offerings will help alleviate those concerns.

Thank you for the opportunity to express our opinion in this process – and for the University of Montevallo's on-going efforts to help make Shelby County an even better place to live and do business.

Best regards.

Sincerely,

Kirk R. Mancer, IOM, CCE, AACE
President & CEO

CCAA Alabama Accredited Chamber of Commerce 2016 - 2019
1301 County Services Drive • Pelham, AL 35124 • (205) 663-4542
www.shelbychamber.org • info@shelbychamber.org
www.discovershelby.com

Shelby County Alabama
102 Depot Street
Columbiana, Alabama 35051

March 28, 2017

Dr. Stephen Craft
Stephens College of Business
Station 6540
Montevallo, AL 35115

RE: Undergraduate Curriculum and Standards Committee (UCSC)

Dr. Craft,

I am writing to express our support for the Informatics syllabi. We believe this curricula offers significant advantages to enhance workforce preparedness for graduates of this new program.

Over the past decade, we have witnessed many of our new technology hires that are ill-prepared for some of the basic functions that await them at the workplace. The integration of project management, cyber hygiene and data mining into the Informatics field of study should produce a more "market" ready product with skill sets that are sought after by many industries and entities.

Thank you for the opportunity to participate in this process. It helped us identify the specificity of the skill sets we utilize on a daily basis.

Sincerely,

Phil Burns
Chief Operating Officer
Shelby County Alabama
pburns@shelbyal.com

E. Similar Programs

Using the ACHE Academic Program inventory found at http://www.ache.state.al.us/Content/Departments/Instruction/StudentInfo.aspx List below all programs at the same degree level (by institution) that utilize the same 6-digit CIP code as the one being requested in the program proposal.

No degree programs in Computer Informatics exist in the state of Alabama so our proposed program is unique to the state. All other four-year institutions offer a Computer and Information Sciences program.

Also, list any programs at other CIP codes that may be offering similar instruction.

If there are no similar programs place a "0/none" by 1. in the listing directly below.

Note: Institutions should consult with ACHE Staff during the NISP phase of proposal development to determine what existing programs are considered duplicative of the proposed program.

The following institutions offer similar programs at this level:

1. 0

Please add numeration and list additional similar programs, if applicable.

If the program duplicates, closely resembles, or is similar to another program already offered in the State, provide justification for that duplication.

Also, if a graduate program, please identify and list any similar programs at institutions in other SREB states.

F. Collaboration With Other Institutions/Agencies

Does the institution plan on collaborating with other institutions in the delivery of this program?

[ ] Yes No [x]

If yes, please indicate below which institutions and describe the basis of this collaboration.

If no, please indicate your reasons why.

At this juncture, the University of Montevallo has sufficient faculty and resources to coordinate the delivery of this program with the addition of one full-time faculty member.

G. Curriculum

1. Program Completion Requirements: (Enter a credit hour value for all applicable components, write N/A if not applicable)

Credit hours required in major courses	39
Credit hours required in minor	
Credit hours in institutional general education or core curriculum	57
Credit hours required in support courses	6
Credit hours in required or free electives	18
Credit hours for thesis or dissertation	
Total credit hours required for completion	**120**

2. Will this program be related to other programs at your institution?

No

If so, which ones and how?

1. Please identify any existing program, option, concentration or track that this program will replace at your institution.

   N/A

2. Is it likely that this program will reduce enrollments in other graduate programs at your institution? If so, please explain.

   N/A

3. If this is a graduate program, please list any existing undergraduate programs at the institution which are directly or indirectly related to the proposed graduate program. If this is a doctoral proposal, also list related master's programs at your institution.

   N/A

6. Please complete the table below indicating the proposed program's courses. Include the course number, and number of credits. (If feasible/useful, please group courses by sub-headings within the table.)

Course Number and Title	Number of Credit Hours	* If New Course
INFM 171 (Social Informatics)	3	*
INFM 241 (Introduction to Informatics and Computing)	3	*
INFM 242 (Logical Foundations for Informatics)	3	*
INFM 345 (Computer Programming I)	3	*
INFM 346 (Computer Programing II)	3	*
INFM 347 (Human Computer Interaction)	3	*
INFM 348 (Information Representation)	3	*
INFM 349 (Informatics Project Management)	3	*
INFM 350 (Database and Applications Security)	3	*
INFM 450 (Data Analysis & Mining)	3	*
INFM 451 (Data Visualization)	3	*
INFM 455 (Information Infrastructure I)	3	*
INFM 456 (Information Infrastructure II)	3	*
INFM 460 (Special Topics in Informatics)	3	*
INFM 476 (Applied Research in Informatics)	3	*
INFM 409 (Internship in Informatics)	3	*
INFM 410 (Internship in Informatics II)	3	*

4. Enumerate and briefly describe any additional requirements such as preliminary qualifying examination, comprehensive examination, thesis, dissertation, practicum or internship, some of which may carry credit hours included in the list above.

N/A

8. Does the program include any options/concentrations. If so, please describe the purpose and rationale and list the courses in the option.

N/A

H. Program Review and Assessment

In the final analysis, the institution and its governing board are accountable for the quality, utility and productivity of this and all other programs of instruction.

With this in mind, please describe the procedures that will be used in assessing the program's outcomes.

Be sure to include:

1. An assessment process for the student learning outcomes;

    A. The assessment plan will consist of learning goals, objectives, and curriculum map indicating where the objectives will be practiced and assessed, what assessment instrument(s) and rubric(s) will be used, if the assessment is formative or summative, and minimum success standards.

        1) Students will be assessed via embedded assessment in coursework as they progress through the program using:

            a. objective questions and code fragments written by students in designated tests and final exams

            b. designated student projects to assess student understanding of concepts presented in class through application of the concepts in assignments

            c. The final program summative projects in INFM 455 Information Infrastructure I, and INFM 456 Information Infrastructure II will be used as an overarching assessment measure of critical programmatic student learning outcomes such as comprehension of object-oriented programming, development of systems architecture, and database design and usage.

2. A follow-up plan to determine accomplishments of graduates such as obtaining relevant employment or being admitted to a masters or doctoral program (graduate or professional).

    A. Accomplishment of graduates will be followed via LinkedIn and by alumni surveys, and exit interviews.

I. Accreditation

If there is a recognized (USDE or CHEA) or other specialized accreditation agency for this program, please identify the agency and explain why you do or not plan to seek accreditation. If there is no accrediting or similar body for this degree program state as such in your response.

There is not an accrediting body for this degree program.

J. Instructional Delivery Method

1. Describe which instructional delivery methods will be utilized in delivering this program.

Traditional classroom instruction will be the primary delivery method used in this program.

2. If distance technology is being utilized, indicate an approximate percent of the total program's courses offered that will be provided by distance education____10___ %

3. If distance education is not being utilized, please explain why not.

Initially, all summer courses will be offered online. As student demand dictates additional online course offerings will be available during the fall and spring semesters.

K. Resource Requirements

1*. Faculty.* Do not attach the curriculum vitae of each existing or additional faculty members to this proposal. (The institution must maintain and have current and additional primary and support faculty curriculum vitae available upon ACHE request for as long as the program is active.) *Please do provide a brief summary of Faculty and their qualifications specific to the program proposal.*

Alexander Mechitov

Alexander Mechitov is a professor of management information systems in the Stephens College of Business at the University of Montevallo. He holds an M.S. in MIS from Moscow State University and a Ph.D. from the Institute for Systems Analysis of the Russian Academy of Sciences in Moscow, Russia. Before joining the faculty of the University of Montevallo in 2001, he worked at Texas A&M University, East Carolina University and the University of West Alabama.

Mechitov's areas of research include multi-criteria decision analysis, decision support and expert systems, data mining and IT outsourcing. He has co-authored two books and published numerous papers in journals such as *Decision Sciences, Journal of Computer Information Systems, Expert Systems with Applications and Decision Support Systems*. In addition, Mechitov studies business education and has been published on specifics of business education in different countries in journals such as *Journal of International Business and Economics, Journal of Strategic Management* and *Business Journal for Entrepreneurs*.

At the University of Montevallo, Mechitov teaches courses in the undergraduate program (Management Information Systems, Database Management, Data Analysis, Statistics and International Business) and in the MBA program (Project and IT Management and Global Organizations and Management).

Mechitov is a regular presenter at national and international conferences and received several “best paper” awards. He was named the University Scholar at the University of Montevallo in 2003. He has been included three times in *Who’s Who Among American Teachers*, nominated by his students.

Helen Moshkovich

Helena Moshkovich is professor of business at the Michael E. Stephens College of Business at the University of Montevallo.

She holds an M.S. degree from the Institute of Engineering and Economics (Moscow, Russia) and a Ph.D. from the Institute for Systems Analysis of the Russian Academy of Sciences. She came to the University of Montevallo in 2001.

Moshkovich is active in research and was selected as the University Scholar in 2008. Her research interests focus on the support of decision-making in a complex business environment as well as in electronic commerce and business education. She is a co-founder of a new decision-making methodology called *Verbal Decision Analysis* (Kluwer Academic Publishers, 1997) and has published three books, nine book chapters and more than 40 papers in American and international journals including such leading outlets as *Decision Sciences, Journal of Multi Criteria Decision Analysis, Decision Support Systems, European Journal of Operational Research* and others. Moshkovich has presented papers at numerous national and international conferences and received several awards including the Best Theoretical/Empirical Research Paper Award from the Decision Sciences Institute.

At the University of Montevallo, Moshkovich teaches in the undergraduate program (Quantitative Methods in Business, Operations Management, Computerized Data Analysis, Financial Information Systems, Electronic Commerce and others) and in the MBA program (Decision Sciences for Operations Management). Previously, Moshkovich was on the faculty at the University of West Alabama and Institute for Systems Analysis. Prior to her academic career she worked as systems' analyst at the Institute for Systems Analysis (Russia).

Nathan McMinn

Nathan McMinn is an Assistant Professor of business at the Michael E. Stephens College of Business at the University of Montevallo.

He holds an M.B.A. degree from Western Carolina University. He came to the University of Montevallo in 1978 where he teaches Management Information Systems. Mr. McMinn's research interest is the "millennials" generation. He teaches Introduction to Computers, web publishing and design, client-side JavaScript, telecommunications and networking, and management information systems.

Kathy Dee

Kathy Dee is the Director of Accreditation for the Michael E. Stephens College of Business at the University of Montevallo.

She holds an MSCS degree from Mississippi State University and joined the University of Montevallo in 2008 after a 23-year career in Information Technology at BellSouth and Accenture. Her career spans working with IBM mainframe applications to three-tier client-server applications. She occasionally teaches the Introduction to Computers course when demand is high and taught an Introduction to Java Programming class when students made a specific request for the course.

a) Please provide faculty counts for the proposed program:

Status	Faculty Type	
	Primary	Support
Current- Full Time	**3**	
Current-Part Time	**1**	
Additional-Full Time (to be hired)	**1**	
Additional-Part Time (to be hired)		

b) Briefly describe the qualifications of new faculty to be hired.

A new full-time faculty member with a Ph.D. in computer science or a closely related field will be hired.

2. Equipment. Will any special equipment be needed specifically for this program?

[**X**] Yes [ ] No

If "Yes", please list:

At start-up an updated computer lab and supporting hardware in the data center will be necessary with an estimated cost of $73,000.

The cost of the new equipment should be included in the table following (Section K.).

3. Facilities. Will any new facilities be required specifically for the program?

[ ] Yes [**X**] No

If "Yes", please list. Only new facilities need be listed. Their cost should be included in the table following (Section K.).

4. Library. Are there sufficient library resources to support the program?

[ ] Yes [X] No

Please provide a brief description of the current status of the library collections supporting the proposed program.

Using the Collection Assessment Manual of the Network of Alabama Academic Libraries (NAAL), provide an indication of the current status of the library collections supporting the proposed program. Please describe how any deficits will be remedied, including the cost of such remedies.

Academic Program: Computer Informatics
Highest Degree Level Offered: Major
Assessment by: Amanda Melcher, Associate Professor and Head of Technical Services
Date of Assessment Completion: September 2016

Overview of Carmichael Library and Collections

The Oliver C. Carmichael Library supports the mission and the information literacy goals of the University of Montevallo by providing and promoting a user-centered information gateway to the resources and services needed by the University community. The Library identifies, acquires, and organizes resources to enhance access to information and to promote information literacy as a life-long endeavor leading to responsible and informed citizenship.

Carmichael Library's collections consist of over 194,000 books, eBooks, journals, and multi-media items. The library provides print, electronic, and microform access to journal article content. Much of this content is provided through the Library's various consortia agreements such as the Alabama Virtual Library (AVL), Network of Alabama Libraries (NAAL), and LYRASIS. The library works with the faculty to determine database, print journal, monograph, and multimedia needs. The library's databases are available to library users 24 hours a day, seven days a week. Library users off campus are authenticated through the library's EZ Proxy system with their UM ID number.

Monographs and Multimedia

Books are arranged by subject in open stacks using the Library of Congress (LC) classification system. With 179,703 print books in the collection and a student FTE of 2,585 for Fall 2015, there are approximately 70 volumes per student. Books are acquired using a multi-vendor system, with cataloging and processing outsourced for faculty requests. The library allocates funds to each department for the purchase of resources; the discipline faculty is responsible for book selection in their respective areas. The library retains a portion of the book budget for the purchase of materials selected by the faculty librarians. The library has more than 18,000 eBooks, provided by Project Muse, Springer, and EBSCO.

The head of technical services liaises with each department to select book and multimedia resources and serves as a channel for communication between the library and the teaching faculty concerning the purchase of resources. If the teaching faculty do not use their budget allocation, the library faculty will choose books for their subject areas to ensure a balanced collection. Table 1 shows that there are over 152 titles related to Computer Informatics/Sciences. These titles collectively have been checked out 61 times, illustrating that this collection gets very little usage. The average age of the collection is 1984, which is dated for a technology-based field that has undergone rapid progress in the last twenty years.

Table 1: Monographs

Call Number	Library of Congress Subject Heading	Titles	Checkouts	Avg age of collection
QA75.5-76.95	**Electronic computers. Computer science. Computer software.**	**152**	**61**	**1984**

There is no current budget allocation for Computer Informatics. The library will need additional funds to bring the collection up to date.

Periodicals: Database and Journal Subscriptions

Carmichael Library has subscriptions to more than 100 electronic databases to identify and locate research materials in electronic format (see the Library's home page for a list of these databases: http://libguides.montevallo.edu/content.php?pid=268442&sid=2215215). Collectively, these electronic databases contain thousands of full text journals that greatly enhance our collection in all disciplines. The Network of Alabama Academic Libraries Consortium (NAAL: http://www.ache.state.al.us/NAAL/) works to get discounted prices on databases. In addition, the Alabama Virtual Library (AVL: http://www.avl.lib.al.us/) funds additional databases. These include multidisciplinary databases such as General OneFile, Academic Search Premier, and Academic OneFile. The publication *Magazines for Libraries* provides reviews and recommendations of core journals from nearly 200 subject specialists. The library's print and electronic holdings were checked against the core list for computer informatics; holdings are modest. (Table 3)

Table 3: Core Journals (Source: *Magazines for Libraries*)

Journal Title	Coverage
Association for Computing Machinery	Multiple Databases: Full Text 1998-2004, Indexed 1996-present
The Computer Journal	No Full Text, Indexed in ArticleFirst 1990-2011
Computerworld	Multiple Databases: Full Text 1982-present, Indexed 1980-present
Educause Review	Some full text on DOAJ, Indexed 1980-present
Information Today	Multiple Databases: Full Text 1988-present, Indexed 1988-present
MIS Quarterly	Business Source Complete, 1977-present

Resource Sharing and Delivery

In order to compensate for any weaknesses in the library's collections and to provide superior service to student and faculty research needs, UM provides a document delivery system to supplement and enhance library collections. ILLiad Resource Sharing Management Software is available to distance, online, and on-campus learners and students, faculty, and staff and no fees are charged for material obtained via Interlibrary loan. ILLiad is accessible from the Library's web page (http://libguides.montevallo.edu/illiad) and requests can be submitted online from any location.

Current monograph holdings are not sufficient to support a major in Computer Informatics.

If "No", please briefly describe how any deficiencies will be remedied; include the cost in the table following (Section K.).

5. Assistantships/Fellowships. Will you offer any assistantships specifically for this program?

[ ] Yes [x] No

If "Yes", how many assistantships will be offered? Be sure to include the amount in the table following. [ ] Number of assistantships offered

Be sure to include the cost of assistantships in the table following (Section K.).

6. Program Budget .The proposal projected that a total of $ 738,000 in estimated new funds will be required to support the proposed program.

A projected total of $ 1,005,400 will be available to support the new program.

L. New Academic Degree Program Proposal Summary Form

- In the following "NEW ACADEMIC DEGREE PROGRAM PROPOSAL SUMMARY" table, please provide a realistic estimate of the costs of the program.
- This should only include the additional costs that will be incurred, not current costs.
- Indicate the sources and amounts of funds available for the program's support.

- DO NOT LEAVE ANY PORTION/SOURCES OF THE NEW FUNDS OR FUNDS AVAILABLE BLANK. ENTER "$0" IF THERE ARE NO NEW FUNDS NEEDED OR NO FUNDS AVAILABLE.

- THERE MUST BE AN ACTUAL DOLLAR AMOUNT PROVIDED FOR TUITION, SINCE THOSE FIGURES REPRESENT PROJECTED ENROLLED STUDENTS.

- **If it is stated that new funds are requested or if it is a reallocation of resources, please explain directly below from what source(s) the funds for the proposed new program, (e.g. faculty, equipment, etc.) will be attained.**

  Funds for new costs associated with this program will be allocated during the annual budget process for fiscal year 2018. With the current cost and enrollment projections the program becomes self-sufficient in fiscal year 2019.

- **If tuition is used to support the program, what start-up revenue source will be used to initiate the program?**

  Start-up revenue will be provided from institutional budget reallocations.

Also, include enrollment and completer projections.

- New enrollment headcounts are defined as **unduplicated** counts across years. For example, if "Student A" would be initially enrolled in the program in year 2, and again is enrolled in the program in years 4 and 5; "Student A" is only counted in the new enrollment headcount in year 2.

- Total enrollment headcounts represent the actual number of students enrolled (both part-time and full time each year. This is a **duplicated** count).

NEW ACADEMIC DEGREE PROGRAM PROPOSAL SUMMARY

INSTITUTION: University of Montevallo

PROGRAM: Computer Informatics

ESTIMATED NEW FUNDS REQUIRED TO SUPPORT PROPOSED PROGRAM

	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
FACULTY*	6,200	130,700	132,100	137,200	138,300	544,500
LIBRARY	4,000	2,000	2,000	2,000	2,000	12,000
FACILITIES	0	0	0	0	0	0
EQUIPMENT*	101,200	0	0	0	0	101,200
STAFF	0	0	0	0	0	0
ASSISTANTSHIPS	0	0	0	0	0	0
OTHER*	15,500	15,000	15,800	16,600	17,400	80,300
TOTAL	126,900	147,700	149,900	155,800	157,700	738,000

SOURCES OF FUNDS AVAILABLE FOR PROGRAM SUPPORT

	Year 1	Year 2	Year3	Year 4	Year 5	TOTAL
INTERNAL REALLOCATIONS	30,600	0	0	0	0	30,600
EXTRAMURAL	0	0	0	0	0	0
TUITION	96,300	150,000	234,000	256,500	238,000	974,800
TOTAL	126,900	150,000	234,000	256,500	238,000	1,005,400

ENROLLMENT PROJECTIONS AND DEGREE COMPLETION PROJECTIONS

Note: "New Enrollment Headcount" is defined as unduplicated counts across years.

	Year 1	Year 2	Year 3	Year 4	Year 5	5-YEAR AVERAGE
FULL TIME HEADCOUNT	8	12	18	19	17	15
PART TIME HEADCOUNT	0	0	0	0	0	0
TOTAL HEADCOUNT	8	12	18	19	17	15
NEW ENROLLMENT HEADCOUNT	8	6	8	10	11	9

						AVERAGE
DEGREE COMPLETION PROJECTIONS	0	0	0	7	9	8

NEW ACADEMIC DEGREE PROGRAM PROPOSAL SUMMARY (after 3 year startup)

INSTITUTION: University of Montevallo

PROGRAM: Computer Informatics

EXPLANATION OF NEW FUNDS REQUIRED TO SUPPORT PROPOSED PROGRAM

FACULTY*	Loaded salary for one full-time PhD faculty hire, adjunct salary for one class per semester.
EQUIPMENT*	Upgrades to data center virtual servers ($32,000), updated classroom furniture ($39,000) and VDI terminals ($20,200), classroom instructional technology ($10,000).
OTHER*	SAS Software licensing ($15,000 licensing first two years), professional development and travel ($2,000), major brochure ($500 first year). Five percent inflation added for software relicensing in years 3-5.